

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application. Please amend claims 1-2, 4, 7, and 9-11 as reflected in the following listing. No new matter is added by these amendments. All pending claims are produced below.

1. (Currently amended) A rotary switch mounted through ~~above and below~~ a panel, comprising:
a scaling member disposed between a portion of the switch and an underside of the panel;
a detent sub-assembly located entirely above the panel; and
a knob that substantially covers the detent sub-assembly wherein the detent sub-assembly is fully enclosed ~~and operates~~ independent of the knob and further wherein only a bushing and shaft extend through the panel.
2. (Currently amended) The rotary switch of claim 1, wherein ~~operation of~~ the detent subassembly is not altered by removal of the knob.
3. (Previously presented) The rotary switch of claim 1, further comprising a spring and at least one ball that cooperates with a detent in the sub-assembly to provide discrete rotational positioning of the knob.
4. (Currently amended) The rotary switch of claim 3, wherein the at least one balls does not extend into the panel.
5. (Previously presented) The rotary switch of claim 3, further comprising a shaft that extends through the panel and the detent sub-assembly and is coupled to the knob.
6. (Previously presented) The rotary switch of claim 5, wherein the shaft is further coupled to an electrical contact that contacts a printed circuit board below the panel.

7. (Currently amended) The rotary switch of claim 6, wherein the detent sub-assembly further comprises a detent sprocket having cylindrical lobes that cooperate with ~~[[a]] the~~ spring, the shaft, and a rotor to set a switch position.

8. (Previously presented) The rotary switch of claim 7, wherein the switch position defines an electrical circuit.

9. (Currently amended) A rotary switch for mounting on an underside of a panel, the rotary switch having a fully enclosed detent sub-assembly, comprised of a sprocket with cylindrical lobes, on a user's side of the panel, and a sealing member disposed between the sub-assembly and an underside of the panel.

10. (Currently amended) A method of selecting an electrical circuit using a panel mounted rotary switch, comprising:

providing a shaft that cooperates with an independent detent sub-assembly, comprised of a sprocket with cylindrical lobes, located entirely on a user's side of the panel, wherein the shaft is coupled to an electrical connection on an underside of the panel and further wherein the detent subassembly is completely on one side of the panel and the rotary switch is located on the underside of the panel and not within the detent sub-assembly; a sealing member disposed between a portion of the switch and an underside of the panel; and

selecting the circuit by rotating the shaft thereby causing the electrical connection to contact a printed circuit board in a configuration approximating the circuit.

11. (Currently amended) A panel mounted rotary switch, comprising:

an independent detent sub-assembly, comprised of a sprocket with cylindrical lobes, located on a user's side of a panel;

a sealing member disposed between a portion of the switch and an underside of the panel;

a knob that substantially covers the detent sub-assembly; and

a shaft that cooperates with the detent sub-assembly to manipulate an electrical connection on an underside of the panel.

12. (Previously presented) The rotary switch of claim 1, wherein the detent sub-assembly has a single spring.